

Abstract

A storage subsystem architecture in which front-end (host interface) control is separated from back-end (disk array) control. A plurality of front-end controller devices (FECs) and a plurality of back-end controller devices (BECs) are provided and are interconnected using storage area networking (SAN) switching devices. Each FEC and BEC includes a SAN interface. In a first preferred embodiment, the SAN interface is an InfiniBand compliant communication medium with associated switching and bus components. Alternative embodiments include a SAN interface that is pair of PCI bus interfaces each connected to one of two PCI bus backplanes. In this configuration, the SAN switch is simply the passive PCI backplane. In a second alternative preferred embodiment, redundant pairs of active SAN switch components are provided and each FEC and BEC includes a SAN interface appropriate to the particular SAN switch component selected.